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Callaghan et al.

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(54) **DATA ENTRY SYSTEMS**

(75) Inventors: **Francis John Callaghan**, St. Helier (GB); **Paul Marshall Doran**, St. Helier (GB); **Gary Douglas Robb**, St. Brelades (GB)

(73) Assignee: **DataQuill Limited**, Tortola (VG)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,810,101 A 5/1974 Avery
(Continued)

FOREIGN PATENT DOCUMENTS

DE 2739157 A1 3/1979
(Continued)

OTHER PUBLICATIONS

EO, Inc, Letter to D. Beaufait, California Wireless, Inc., Mar. 22, 1993, "Own Your Own Personal Communicator 440", Bates Stamped pp. HSD0004019-HSD0004020.

(Continued)

Primary Examiner — Jean Gelin

(74) *Attorney, Agent, or Firm* — Mintz Levin Cohn Ferris Glovsky and Popeo, P.C.

(57) **ABSTRACT**

A data entry system includes a hand held data entry unit having a reading sensor for sensing commands and/or data, rewritable storage for storing information relating to selectable items, a controller (a microprocessor or other processing circuitry) and a display screen for displaying a user readable representation of the commands and/or stored information for a selected item, and a telecommunication interface for the telephonic transmission of information relating to a selected item or items from the storage to a remote processing center and for the telephonic information relating to selectable items from the remote processing center to the storage. Preferably a telecommunications interface is provided in the hand held unit for cellular or other wireless telephony systems. The hand held unit can be configured to combine the data entry functions with those of audio telephony.

23 Claims, 11 Drawing Sheets

